

PRIAMUS

Serial Publication of the Centre for Entomological Studies Ankara

Volume 16, Part 2

06 04 2018

ISSN 1015-8243

<http://zoobank.org/urn:lsid:zoobank.org:pub:FCD41B46-DB21-48DD-B10B-46E99CE6EEA4>

On the Lepidoptera fauna of Elmalık village (Edremit, Van Province, East Turkey)

Muhabbet Kemal¹ Ahmet Ömer Koçak Hanife Uçak

Abstract: On the Lepidoptera fauna of Elmalık village (Edremit, Van Province, East Turkey). *Priamus* 16 (2): 43-63, 46 figs.

Totally 197 species of 23 families are listed from Elmalık village (Van Province, East Turkey). *Scotopteryx elbursica* (Geometridae) is reported here as new for the fauna of Turkey. Eight species are recorded as new for Van Province. The male and female genitalia of some species are illustrated.

Key words: *Lepidoptera*, Turkey, Van, Edremit, Elmalık, fauna, ecology, bionomy, genitalia.

Elmalık is a small village located on the gently sloping territory at SW of Edremit city, capital of the district. Villagers occupy with the garden and field agriculture. Especially large and abandoned orchards near the village, called “Münir’s garden” appears as a remarkable place for the nocturnal Lepidoptera (Figs. 1, 2).

The aim of selecting a place within the area of urbanization for the faunal study is in order to understand its negative effect on the natural fauna. The first opinion on this subject, the level of the population of some rare species is very low. Of course, this should be a long-term research process. The present study is based on a one-year field study only. Although, the results obtained are limited, it may be considered as a baseline data for the similar work to be done in the future.

In the present study, 197 species of 23 families are reported here for the first time. Among them, some interesting or little known species are sporadic represented there, due to the heavy pressure of grazing from one side, and urbanization from the other side. The following moths are noteworthy: *Alsophila hirsutaria* (previously known from Çatak only in the province), *Charissa* sp., *Cleta perpusillaria* (known from Tuşba only in the province), *Enanthyperythra legataria*, *Proutictis artesiaria*, *Scotopteryx elbursica* (Geometridae), *Exaeretia ledereri* (Oecophoridae), *Loxostege peltaloides*, *Megasis* (s.str.) *kocaki* (Pyrallidae), *Ancylis achatana*, *Phalonidia acutana*, *Phaneta pauperana* (Tortricidae). Faunistically, following species are new to Van Province: *Polyommatus poseidon* (Lycaenidae), *Ethmia fumidella* (Ethmiidae), *Aspilapteryx* (s.str.) *tringipennella* (Gracillariidae), *Exaeretia ledereri* (Oecophoridae), *Ancylis achatana*, *Cochylimorpha fucosa*, *Phalonidia acutana*, *Phaneta pauperana* (Tortricidae). Besides, *Scotopteryx elbursica* (Geometridae) is reported here as new for the fauna of Turkey.

¹ Asst. Prof. Dr. Muhabbet Kemal, Van Yüzüncü Yıl University, Faculty of Science, Dept. of Biology, Campus, Van / Turkey.

e-mail: muhabbet_kemal@yahoo.com.tr <http://zoobank.org/Authors/671DD110-BDF1-49C8-964D-2A9251BE7824>

co-authors: Prof. em. Dr. Ahmet Ömer Koçak, c/o Van Yüzüncü Yıl University, Faculty of Science, Dept. of Biology, Campus, Van / Turkey. e-mail: cesa_tr@yahoo.com.tr [corresponding author]

<http://zoobank.org/Authors/4755104C-24B4-4E00-8831-5F5E08B9E831>

Hanife Uçak, c/o Yüzüncü Yıl University, The Institute of Natural & Applied Sciences, e-mail: uck_hanife@hotmail.com - <http://zoobank.org/Authors/D993C631-6218-4E1E-AA7A-E8C36342E527>

The present study is also a part of the major project of the Cesa, entitled “Lepidoptera of Turkey (LTR)”.² Among the last published works within this project, the following papers are noteworthy: Kemal & Koçak (2016a-c, 2017a-e); Kemal, Koçak & Uçak (2017); Kemal & Uçak (2018); Kemal, Kızıldağ & Koçak (2018); Kemal, et al. (2018); Koçak & Kemal (2015), etc.

The material was collected by the authors in 2017, between April and October, by day and by night. All the material was identified by the authors. They are partly mentioned below, and preserved in the Cesa Collection.

List of the Lepidoptera

Butterflies

Totally 42 butterfly species inhabit around the village.

Argynniidae

This family is represented here by six species.

1. *Aglais urticae* (Linnaeus, 1758)
2. *Melitaea (Cinclidia) ornata* Christoph, 1893
3. *Melitaea (s.str.) arduinna* (Fabricius, 1787)
4. *Melitaea (s.str.) cinxia* (Linnaeus, 1758)
5. *Polygonia (Comma) egea* (Cramer, [1775])
6. *Vanessa (Cynthia) cardui* (Linnaeus, 1758)

Hesperiidae

Totally six species are recorded from the area.

7. *Carcharodus (Reverdinus) orientalis* Reverdin, 1913 (Fig.3)
8. *Carcharodus (s.str.) alceae* (Esper, [1780])
9. *Pyrgus sidae* (Esper, [1784])
10. *Spialia (Neospialia) orbifer* (Hübner, [1823])
11. *Thymelicus novus* (Reverdin, 1916)
Material examined: 4♂♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
12. *Thymelicus sylvestris* (Poda, 1761)
Material examined: 1♂2♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.

Lycaenidae

In the area, 16 species are recorded.

13. *Cupido (s.str.) osiris* (Meigen, [1829]) (Fig.4)
14. *Glaucopsyche (s.str.) alexis* (Poda, 1761)
15. *Lampides boeticus* (Linnaeus, 1767)
Material examined: 1♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
16. *Lycaena (Thersamonia) asabinus* (Gerhard, [1850]) (Fig.5)
Rare in the area.
17. *Lycaena (Thersamonia) kefersteinii* (Gerhard, [1850]) (Fig.6)
Rare in the area.
18. *Plebejus (Plebejides) zephyrinus* (Christoph, 1884)

² <https://www.researchgate.net/project/Lepidoptera-of-Turkey-LTR>

19. *Polyommatus (Albulina (Plebejidea)) loewii* (Zeller, 1847)
Material examined: 2♂1♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
20. *Polyommatus (s.str. (Agrodiaetus (Actisia))) pseudactis* (Forster, 1960)
Material examined: 1♂2♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
21. *Polyommatus (s.str. (Agrodiaetus (Admetusia))) demavendi* (Pfeiffer, 1938)
Material examined: 7♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
22. *Polyommatus (s.str. (Agrodiaetus (Damaia))) poseidon* (Herrich-Schäffer, [1851])
Very rare in the area. New for Van Province.
23. *Polyommatus (s.str. (Lysandra)) bellargus* (Rottemburg, 1775)
Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
24. *Polyommatus (s.str. (Meleageria)) daphnis* ([Denis & Schiffermüller], 1775)
Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
25. *Polyommatus (s.str. (Plebicula)) amandus* (Schneider, 1792)
26. *Polyommatus (s.str. (Thersitesia)) thersites* (Canterer, [1835])
27. *Polyommatus (s.str.) icarus* (Rottemburg, 1775)
The last three species are common at the places, where Liquorice [*Glycyrrhiza (Fabaceae)*] is cultivated.
28. *Pseudophilotes vicrama* (Moore, 1865)

Papilionidae

The family is represented by 3 species only. Among them the caterpillars of *Archon* and *Zerynthia* species are *Aristolochia* feeders; therefore their butterflies are seen frequently in the fallow, where *Aristolochia* grows.

29. *Archon apollinaris* (Staudinger, [1892]) (Fig.7)
Rare in the area.
See for the early stages of the species in Van Province (Kemal & Koçak, 2013).
30. *Papilio (s.str.) machaon* Linnaeus, 1758
31. *Zerynthia (Allancastris) deyrollei* (Oberthür, 1869)

Pieridae

The family is also poorly represented by five species only.

32. *Colias (Eriocolias) crocea* (Fourcroy, 1785)
33. *Leptidea duponcheli* (Staudinger, 1871)
34. *Pieris (Artogeia) mannii* (Mayer, 1851)
Material examined: 5♂1♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
35. *Pieris (Artogeia) persis* Verity, 1922
36. *Pontia edusa* (Fabricius, [1777]) (Fig.8)
Rare in the area. This species cannot be identified precisely from *daphidice*, by using the external features (Geiger & Scholl, 1982). Both species are found in Turkey, but the former apparently commoner and widely distributed than the latter.

Satyridae

The family is represented by six species. Among them *Esperarge clymene*, and *Hyponephele lupina* fly together and sit frequently on the shady trunk of old trees.

37. *Coenonympha (s.str.) pamphilus* (Linnaeus,1758) (Fig.9)
 38. *Esperarge (s.str.) clymene* (Fabricius,1787)
 Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
39. *Hyponephele (s.str.) lupina* (Costa,[1836])
 Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
40. *Lasiommata maera* (Linnaeus,1758)
 41. *Maniola (s.str.) jurtina* (Linnaeus,1758)
 Material examined: 4♂5♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.
42. *Melanargia (Turcargia) hylata* (Ménétriés,1832) (Fig.10)
 Material examined: 3♂3♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.

Moths

Following 155 taxa are listed alphabetically.

Arctiidae

Only two nocturnal species are reported here.

43. *Euplagia splendidior* (Tams,1922)
 Usually nocturnal, but in hot season it can fly in the shadow.
44. *Ocnogyna (s.str.) loewii* (Zeller,1846)
 Nocturnal, autumnal.
 Material examined: 3♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M.Kemal, A.Koçak leg.

Autostichidae

45. *Apiletria* sp.
 Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

Coleophoridae

46. *Coleophora* sp.1
 Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M. Kemal & A.Koçak leg.
47. *Coleophora* sp.2
 Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.

Ethmiidae

48. *Ethmia fumidella* (Wocke,1850)
 Nocturnal, vernal species.
 Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 19.iv.2017, M.Kemal, A.Koçak, H.Uçak leg.
 New to Van Province.

Gelechiidae

For the time being, only five nocturnal species are reported here.

49. *Aristotelia* sp.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.; 1♂, from same place 25.viii.2017, M.Kemal & A.Koçak leg.

50. *Aroga* sp.

Material examined: 4♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg. GP2891♂.
The species of this genus will be separately studied.

51. *Isophrietis* sp.

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

52. *Metzneria* sp.

Material examined: 11♂♀. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

53. *Nothris verbascella* ([Denis & Schiffermüller],1775)

Apparently rare.

Geometridae**54. *Alsophila hirsutaria* (Fabricius,1781) (Fig.11)**

(= *aescularia* [Denis & Schiffermüller],1775, nomen nudum, without description)

Vernal, nocturnal.

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 19.iv.2017, M.Kemal, A.Koçak, H.Uçak leg.

55. *Aplasta ononaria* (Fuessly,1783) (Fig.12)**56. *Aplocera plagiata* (Linnaeus,1758)**

Material examined: 12♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

57. *Camptogramma bilineatum* (Linnaeus,1758)

Material examined: 1♀. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.

58. *Catarhoe permixtaria* (Guenée,[1858])**59. *Charissa* sp. (Fig.13)**

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg. GP2920♂.

The species of this genus will be separately studied.

60. *Cleta perpusillaria* (Eversmann,1847) (Fig.14)**61. *Colotois pennaria* (Linnaeus,1761)**

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M.Kemal, A.Koçak leg.

62. *Dyscia (Calodyscia) innocentaria* (Christoph,1885)**63. *Enanthyperythra legataria* (Herrich-Schäffer,[1852])**

Vernal-preaestival, nocturnal.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.iv.2017, M.Kemal, A.Koçak, H.Uçak leg.

64. *Eupithecia breviculata* (Donzel,1837)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

65. *Eupithecia* sp.1

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

66. *Eupithecia* sp.2

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

67. *Idaea aversata* (Linnaeus, 1758)

68. *Idaea ochrata* (Scopoli, 1763)

Material examined: 12♂♀. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

69. *Idaea ossiculata* (Lederer, 1871)

Material examined: 6♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

70. *Idaea politaria* (Hübner, [1799])

71. *Idaea proclivata* (Fuchs, 1902)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

72. *Idaea trigeminata* (Haworth, [1809])

73. *Larerrannis marginaria* (Fabricius, 1777)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 19.iv.2017, M.Kemal, A.Koçak, H.Uçak leg.

74. *Peribatodes rhomboidaria* ([Denis & Schiffermüller], 1775) (Fig.15)

75. *Phaiogramma etruscaria* (Zeller, 1849)

76. *Phigalia pedaria* (Fabricius, 1787) (Fig.16)

(= *pilosaria* [Denis & Schiffermüller], 1775, nomen nudum, without description)

Vernal, nocturnal.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 19.iv.2017, M.Kemal, A.Koçak, H.Uçak leg.

77. *Proutictis artesiaria* ([Denis & Schiffermüller], 1775) (Figs. 23-25)

Aestival, nocturnal. GP2910♂

78. *Rhodostrophia* (*Asiotrophia*) *auctata* (Staudinger, 1879)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017; 3♂ from same place, 25.viii.2017, M.Kemal & A.Koçak leg.

79. *Rhodostrophia* (*s.str.*) *sieversi* (Christoph, 1882)

80. *Scopula beckeraria* (Lederer, 1853)

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.; 12♂♀. Same place, 30.v.2017, M.Kemal, A.Koçak leg.

81. *Scopula decorata* ([Denis & Schiffermüller], 1775)

82. *Scopula marginepunctata* (Goeze, 1781)

Material examined: 4♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

83. *Scotopteryx elbursica* (Bytinski-Salz & Brandt, 1937) (Figs.26-28)

Material examined: 1♂. East Turkey, Van Prov., Edremit, Elmalık 1730m (65Le), 30.v.2017, GP2781♂. M. Kemal & A.Koçak leg. (Cesa)

This species is a new record for the fauna of Turkey.

84. *Scotopteryx subvicinaria* (Staudinger, 1892)

85. *Selenia lunularia* (Hübner, 1788) (Figs.29-30)

Material examined: 1♂1♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M. Kemal & A.Koçak leg. GP2822♂.

86. *Thalera fimbrialis* (Scopoli, 1763)

87. *Thetidia persica* Hausmann, 1996

Gracillariidae

88. *Aspilapteryx (s.str.) tringipennella* (Zeller, 1839) (Fig. 17)
Observed by day. For the identification of the material, if collected, Triberti (1985) is an important reference work.
New for Van Province.

Lasicampidae

89. *Chondrostega pastranum* Lederer, 1858
Material examined: 3♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.
90. *Malacosoma castrensis* (Linnaeus, 1758)
Observed in larval stage.

Noctuidae

Most of the adults of the species are aestival.

91. *Acantholipes regularis* (Hübner, [1813])
92. *Acontia (Emmelia) trabealis* (Scopoli, 1763)
93. *Agrochola (s.str.) pistacina* (Goeze, 1781)
Nocturnal.
Material examined: 4♂♀. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg. GP2754♂
94. *Agrotis (Crassagrotis) bigramma* (Esper, [1790])
Autumnal, nocturnal.
Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.
95. *Agrotis (s.str.) ipsilon* (Hufnagel, 1766)
Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.
96. *Agrotis (s.str.) segetum* ([Denis & Schiffermüller], 1775)
Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, 1♀. Same place, 15.x.2017, M.Kemal, A.Koçak leg.
97. *Ammoconia anonyma* Ronkay & Varga, 1984
Autumnal, nocturnal.
Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M.Kemal, A.Koçak leg.
98. *Apamea (s.str.) leucodon* (Eversmann, 1837)
99. *Apamea* sp.1
Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.
100. *Apamea* sp.2
Material examined: 3♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.
101. *Apamea* sp.3
Material examined: 5♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.
102. *Autographa gamma* (Linnaeus, 1758)
Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.
103. *Cornutiplusia circumflexa* (Linnaeus, 1767)
Material examined: 4♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

104.*Cryphia* sp.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

105.*Cucullia* (s.str.) *argentina* (Fabricius,1787)**106.***Cucullia* sp.**107.***Dichagyris* (*Yigoga*) *flavina* (Herrich-Schäffer,[1852])**108.***Drasteria* *cailino* (Lefèbvre,1827)**109.***Earias* *clorana* (Linnaeus,1761)**110.***Episema* sp.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M.Kemal, A.Koçak leg.

111.*Eublemma* (*Glossodice*) *polygrammum* (Duponchel,[1842])**112.***Eublemma* (*albida*-gr.) *gratissimum* (Staudinger,1892)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.; 1♂ from same place, 25.viii.2017, M. Kemal & A.Koçak leg.

113.*Eublemma* (*bulla*-gr.) *purum* (Hübner,[1813])**114.***Eublemma* (*ostrina*-gr.) *ostrinum* (Hübner,[1808])**115.***Eublemma* (*parva*-gr.) *parvum* (Hübner,[1808])

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.

116.*Euxoa* sp.

Material examined: 2♀. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

117.*Hadena* (*Anepia*) *perplexa* ([Denis & Schiffermüller],1775)**118.***Hadena* (s.str.) *humilis* (Christoph,1893)**119.***Hadena* (s.str.) *magnolii* (Boisduval,1828)

Material examined: 7♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak

120.*Hecatera* *spinaciae* (Vieweg,1790)

(= *dysodea* [Denis & Schiffermüller],1775, nomen nudum, without description)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.

121.*Lacanobia* (s.str.) *w-latinum* (Hufnagel,1766)

Material examined: 6♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

122.*Lygephila* (s.str.) *craccae* (Fabricius,1787)

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.

123.*Mythimna* (*Aletia*) *l-album* (Linnaeus,1767)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

124.*Mythimna* (*Aletia*) *vitellina* (Hübner,[1808])

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

125.*Mythimna* (*Hyphilara*) *albipuncta* (Fabricius,1787)

Material examined: 6♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak

126.*Mythimna* (*Hyphilara*) *ferrago* (Fabricius,1787)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.

127.*Noctua* (*Latanocua*) *orbona* (Hufnagel,1766)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M.Kemal, A.Koçak leg.

128.*Ochropleura* *plecta* (Linnaeus,1761)**129.***Orthosia* (s.str.) *incerta* (Hufnagel,1766) (Figs. 18, 31, 32)

Vernal, nocturnal. GP2757♂

Material examined: 18♂♀. Van Pr., Edremit, Elmalık 1750m, 19.iv.2017, M.Kemal, A.Koçak, H.Uçak leg.

130. *Perigrapha (s.str.) i-cinctum* ([Denis & Schiffermüller],1775)

Vernal, nocturnal.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 19.iv.2017, M.Kemal, A.Koçak, H.Uçak leg.

131. *Polymixis (Parabrachionycha) leuconota* (Frivaldsky,1841)

132. *Sideridis (Aneda) rivularis* (Fabricius,1775)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

133. *Sideridis (Luteohadena) luteago* ([Denis & Schiffermüller],1775)

Material examined: 3♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

134. *Simyra dentinosa* Freyer,1839 (Figs. 19, 20)

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 19.iv.2017, M.Kemal, A.Koçak, H.Uçak leg. Its caterpillars feed gregariously on *Euphorbia* spp. in summer.

135. *Spodoptera exiguum* (Hübner,[1808])

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.

136. *Tholera hilaris* (Staudinger,1901)

Autumnal, nocturnal.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M. Kemal & A.Koçak leg.

137. *Tyta luctuosa* ([Denis & Schiffermüller],1775)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M. Kemal & A.Koçak leg.

138. *Ulochlaena hirta* (Hübner,[1813])

Autumnal, nocturnal.

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M. Kemal & A.Koçak leg.

139. *Xestia (Megasema) c-nigrum* (Linnaeus,1758)

The most abundant species in the area.

140. *Xylena exsoleta* (Linnaeus,1758)

Material examined: 1♀. Van Pr., Edremit, Elmalık 1750m, 30.iv.2017, M.Kemal, H.Uçak & A.Koçak leg.

Notodontidae

141. *Dicranura ulmi* ([Denis & Schiffermüller],1775)

142. *Pterostoma palpinum* (Linnaeus,1761)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

Oecophoridae

143. *Exaeretia ledereri* Zeller,1854 (Fig.33)

GP2847♂

New for Van Province.

144. *Pleurota (s.str.) aff. pyropella* ([Denis & Schiffermüller],1775)

Material examined: 11♂♀. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

145. *Pleurota* sp.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

Pyrallidae

Most of the adults of the species are aestival and nocturnal.

146. *Acrobasis advenella* (Zincken, 1818)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.; 5♂, from same place, 25.viii.2017, M.Kemal & A.Koçak leg.

147. *Ancylolomia* sp. (Fig.21)

Material examined: 7♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017; 1♂, from same place, 15.x.2017, M.Kemal, A.Koçak leg.

148. *Chrysocrambus craterellus* (Scopoli, 1763)**149. *Chrysocrambus linetellus* (Fabricius, 1781)**

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.

150. *Cynaeda* (s.str.) *gigantea* (Staudinger, 1879)**151. *Dolicharthria punctalis* ([Denis & Schiffermüller], 1775)**

Material examined: 17♂♀. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

152. *Dolicharthria stigmosalis* (Herrich-Schäffer, [1848])

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, sciophil, M.Kemal & A.Koçak leg.

153. *Epactoctena octogenalis* (Lederer, 1863)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

154. *Ephelis cruentalis* (Geyer, [1832])**155. *Epiepischnia pseudolydella* Amsel, 1954**

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

156. *Evergestis flavifuscalis* Rebel, 1903

Rare.

157. *Evergestis politalis* ([Denis & Schiffermüller], 1775)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

158. *Euchromius* sp.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

159. *Homoeosoma sinuellum* (Fabricius, 1794)

Material examined: 1♂1♀. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

160. *Hyperlais dulcinalis* (Treitschke, 1835)

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak, 1♂, same place, 28.vi.2017, A.Koçak leg.

161. *Hypsotropa limbella* Zeller, 1848

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

162. *Isauria dilucidella* (Duponchel, 1836)**163. *Loxostege peltaloides* (Rebel, 1932) (Fig.22)**

Autumnal, nocturnal.

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, M.Kemal, A.Koçak leg.

164. *Megasis (s.str.) kocaki* Akin, 2016

Vernal, nocturnal.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.v.2017, heliophil, M. Kemal & H.Uçak leg.

165. *Metacrambus carectellus* (Zeller, 1847)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

166. *Metasia suppandalis* (Hübner, [1823])

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

167. *Myelois (s.str.) multiforella* Ragonot, 1893

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

168. *Nomophila noctuella* ([Denis & Schiffermüller], 1775)

169. *Paracorsia repandalis* ([Denis & Schiffermüller], 1775)

Material examined: 4♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017; 1♂ from same place, 25.viii.2017, M.Kemal, A.Koçak leg.

170. *Pempeliella ornatella* ([Denis & Schiffermüller], 1775) (Figs. 34-36)

Nocturnal, uncommon. GP2850♂.

171. *Psammotis pulveralis* (Hübner, 1796)

Rare.

172. *Pyrausta despicata* (Scopoli, 1763)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

173. *Stemmatophora brunnealis* (Treitschke, 1829)

Material examined: 5♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

174. *Synaphe moldavica* (Esper, [1789])

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 01.vii.2017, A.Koçak & H.Uçak leg.

175. *Tegostoma perlepidalis* (Guenée, 1854)

Rare.

Scythridae

176. *Scythris (scopolella-gr.) apicalis* (Zeller, 1847)

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

177. *Scythris (scopolella-gr.) flabella* (Mann, 1861)

Sphingidae

178. *Macroglossum stellatarum* (Linnaeus, 1758)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 15.x.2017, nocturnal, M.Kemal, A.Koçak leg.

179. *Smerinthus kindermanni* Lederer, 1852

Tineidae**180.** *Wegneria panchalcella* (Staudinger, 1871)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

Tortricidae**181.** *Acleris variegana* ([Denis & Schiffermüller], 1775)**182.** *Aethes* sp.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

183. *Ancylis achatana* ([Denis & Schiffermüller], 1775)

Nocturnal. New for Van Province.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

184. *Aphelia (Zelothereses) ferugana* (Hübner, 1793)

Material examined: 3♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

185. *Archips* sp.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

186. *Cnephasia (s.str.) orientana* (Alpheraky, 1877)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

187. *Cnephasia* sp.

Material examined: 16♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak, 2♂♀, same place, 28.vi.2017, A.Koçak leg.

188. *Cochylimorpha fucosa* (Razowski, 1970) (Figs. 37, 38)

Nocturnal. Apparently rare. GP2849♂

New for Van Province.

189. *Cochylis posterana* Zeller, 1847

Material examined: 3♂♀. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak

190. *Cydia pomonella* (Linnaeus, 1758)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 25.viii.2017, M.Kemal & A.Koçak leg.

191. *Diceratura* sp.

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

192. *Hedya dimidioalba* (Retzius, 1783)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg.

193. *Phalonidia acutana* (Kennel, 1913) (Figs. 39-41)

Nocturnal.

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 29.v.2017, M.Kemal, H.Uçak & A.Koçak leg.; 2♂, from same place, 29.v.2017, M.Kemal & A.Koçak leg. GP2709♂.

New for Van Province.

194. *Phalonidia contractana* (Zeller, 1847) (Figs. 42, 43)

Material examined: 2♂. Van Pr., Edremit, Elmalık 1750m, 28.vi.2017, A.Koçak leg. GP2821♂.

195. *Phaneta pauperana* (Duponchel, 1843) (Figs. 44-46)

Nocturnal. New for Van Province. GP2671♀, GP2672♂.

Yponomeutidae

196. *Plutella (s.str.) xylostella* (Linnaeus, 1758)

Material examined: 1♂. Van Pr., Edremit, Elmalık 1750m, 30.v.2017, M.Kemal, A.Koçak leg.

197. *Yponomeuta malinella* (Zeller, 1838)

References

- Geiger, H.-J. & A.Scholl**, 1982, *Pontia daplidice* (Lepidoptera, Pieridae) in Südeuropa - eine Gruppe von zwei Arten. *Mitt. schweiz. ent. Ges.* 55: 107-114.
- Kemal, M. & A.Ö.Koçak**, 2013, On the occurrence of *Archon apollinaris* (Stgr.) in Van Province (East Turkey) (Lepidoptera, Papilionidae). *Cesa News* 88: 14-21, 10 figs., 1 map.
- Kemal, M. & A.Ö.Koçak**, 2016a, On the Noctuidae fauna of Bahçesaray district (Van Province, East Turkey) (Lepidoptera). *Priamus* 14 (1): 1-74, 30 figs. 56 maps.
- Kemal, M. & A.Ö.Koçak**, 2016b, On the Geometridae fauna of Bahçesaray district, together with some morphological and eco-faunistic notes (Van Province, East Turkey) (Lepidoptera). *Priamus* 14 (2): 76-119, 69 figs. 32 maps.
- Kemal, M. & A.Ö.Koçak**, 2016c, On the fauna of Macro-Heterocera of Bahçesaray district, with some eco-faunistic notes (Van Province, East Turkey) (Lepidoptera). *Priamus* 14 (3): 121-159, 43 figs. 36 maps.
- Kemal, M. & A.Ö.Koçak**, 2017a, On the Lepidoptera fauna of a single locality, Saklıvadi (Van Province, East Turkey). *Priamus* 15 (1): 1-80, 101 figs., 45 maps, 1 Tab.
- Kemal, M. & A.Ö.Koçak**, 2017b, Annotated list of the moths of Süphan Volcano (Bitlis Province, East Turkey) (Lepidoptera). *Priamus* 15 (2): 82-123, 72 figs.
- Kemal, M. & A.Ö.Koçak**, 2017c, On the Microlepidoptera of Bahçesaray district (Van Province, East Turkey). *Priamus* 15 (3): 125-164, 105 figs.
- Kemal, M. & A.Ö.Koçak**, 2017d, On the butterflies of Bahçesaray district (Van Province, East Turkey). *Priamus* 15 (4): 166-223, 112 figs. 17 maps.
- Kemal, M. & A.Ö.Koçak**, 2017e, On the moths of Mutki district (Bitlis Province, East Turkey) (Lepidoptera). *Cesa News* 150: 2-46, 93 figs.
- Kemal, M., Koçak, A.Ö. & H.Uçak**, 2017, On a collection of *Lepidoptera* from Dağlıca (South-East Turkey, Hakkari Province). *Cesa News* 139: 1-24, 42 figs.
- Kemal, M. & H.Uçak**, 2018, Description of a new species of the genus *Wehrliola* Strand in East Turkey (Lepidoptera, Geometridae). *Misc. Pap.* 168: 1-4, 11 figs.
- Kemal, M., Kızıldağ, S. & A.Ö.Koçak**, 2018, Preliminary list of the Lepidoptera of Zerneş, with some faunistic, taxonomic, and molecular remarks (East Turkey, Van Province). *Misc. Pap.* 171: 1-16, 41 figs.
- Kemal, M., Yıldız, I., Kızıldağ, S. Uçak, H. & A.Ö.Koçak**, 2018, Taxonomic and molecular evaluation of *Apochima* Agassiz in East Turkey, with a description of a new genus (Lepidoptera, Geometridae, Ennominae). *Misc. Pap.* 169: 1-13, 1 Table, 27 figs., 1 map.
- Koçak, A.Ö. & M.Kemal**, 2015, On the Pyralidae of South East Turkey (Lepidoptera). *Cesa News* 119: 11-37, 18 figs.
- Triberti, P.**, 1985, A revision of the genus *Aspilapteryx* Spuler (Lepidoptera, Gracillariidae). *Z. ArbGem. Öst. Ent.* 37 (1/2): 1-16, figs.

Observations in nature



Figs. 1, 2 – Van Prov., Edremit, Elmalık, Munir's Garden 1750m, 30.iv.2017 (left). Upper parts in early summer, 4.vi.2017 (right), M.Kemal (Cesa)



Figs. 3, 4 – *Carcharodus orientalis* at rest. Elmalık 4 6 2017 (left); *Cupido osiris* in copula. Elmalık, on the same date (right), M. Kemal (Cesa)



Figs. 5, 6 – *Lycaena asabinus*, a male at rest (2. generation) from Elmalık 2.viii.2017 (left); *Lycaena kefersteinii* (1. generation) from Elmalık 4.vi.2017 (right), M. Kemal (Cesa)



Figs. 7, 8 – Full grown caterpillar on *Aristolochia bottae* Elmalık, on 4.vi.2017 (left); *Pontia edusa* at rest. Elmalık, 25.viii.2017 (2.generation) (right), M.Kemal (Cesa)



Figs. 9, 10 – *Coenonympha pamphilus* (left); *Melanargia hylata* female (right), both from Elmalık, on 2.viii.2017, M. Kemal (Cesa)



Figs. 11, 12 – *Alsophila hirsutaria*, at rest. Elmalık, on 18.iv.2017 (left); *Aplasta ononaria* Elmalık, on 2.viii.2017 (right), M. Kemal (Cesa)



Figs. 13, 14 – *Charissa* sp., at rest. Elmalık on 25.viii.2017 (left); *Cleta perpusillaria*, a female at rest by day. Elmalık on 4.vi.2017, at 9:29 a.m. (right), M. Kemal (Cesa)



Figs. 15, 16 – *Peribatodes rhomboidaria*, at rest. Elmalık on 30.iv.2017 (left); *Phigalia pedaria*, at rest. Elmalık, 18.iv.2017 (right), M. Kemal (Cesa)



Fig. 17 - *Aspilapteryx tringipennella*, at rest, Elmalık 1750m, on 30.iv.2017, M.Kemal (Cesa)



Figs. 18, 19 – *Orthosia incerta*, at rest. Elmalık 1750m, 18.iv.2017 (left); *Simyra dentinosa*, at rest from same place and date (right), M.Kemal (Cesa)



Figs. 20 – Young caterpillars of *Simyra dentinosa* on *Euphorbia* sp. Elmalık 1750m, 4.vi.2017, M. Kemal (Cesa)



Figs. 21, 22 – *Ancylolomia* sp., at rest. Elmalık 1750m 26.viii.2017 (left); *Loxostege peltaloides*, at rest. Elmalık 1750m, 16.x.2017 (right), M. Kemal (Cesa)

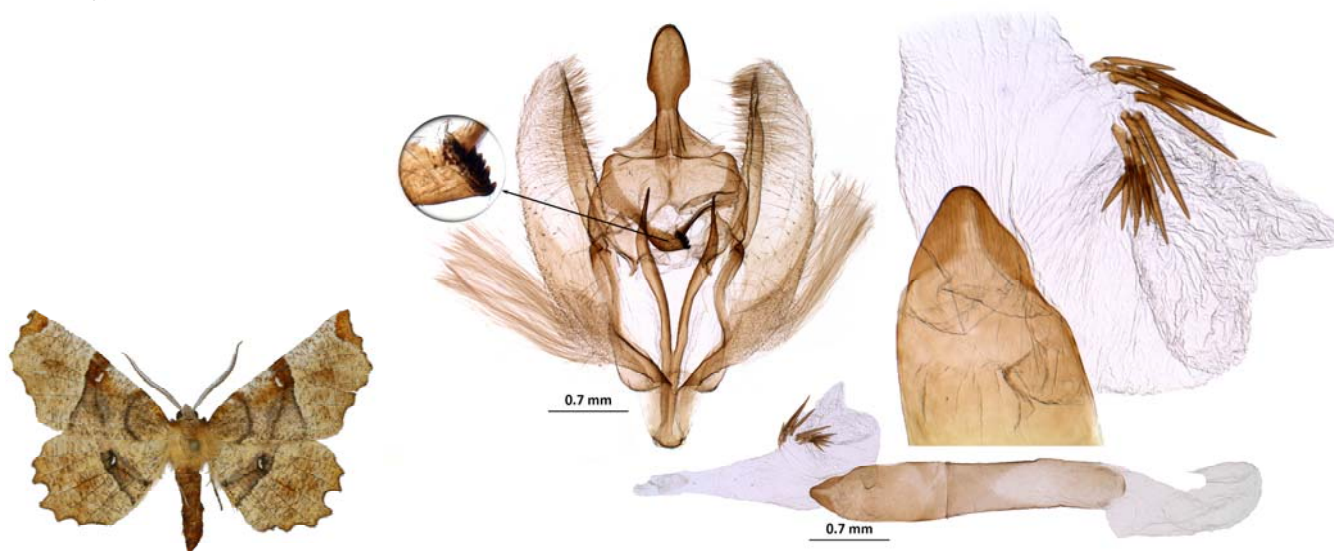
Images of the genitalia



Figs. 23-25 - *Proutictis artesiaria*. Upperside of male (left). Male genitalia and abdominal sternites (right). Elmalık, 28.vi.2017, M. Kemal (Cesa)



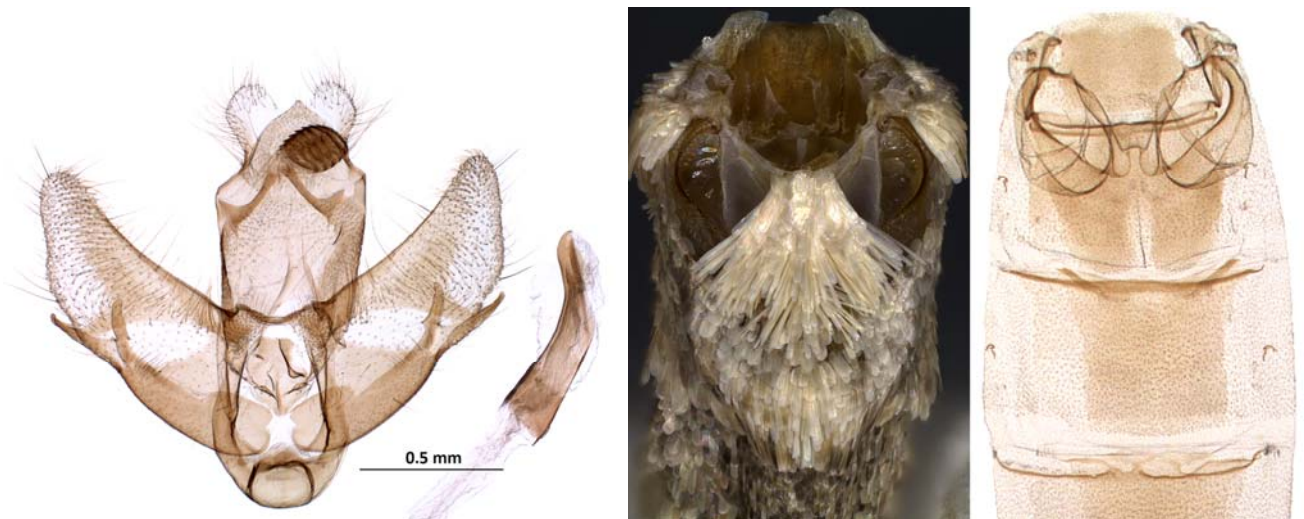
Figs. 26-28 - *Scotopteryx elbursica*. Upperside of male (left). Male genitalia and abdominal sternites (right). Elmalık, 28.vi.2017, M. Kemal (Cesa)



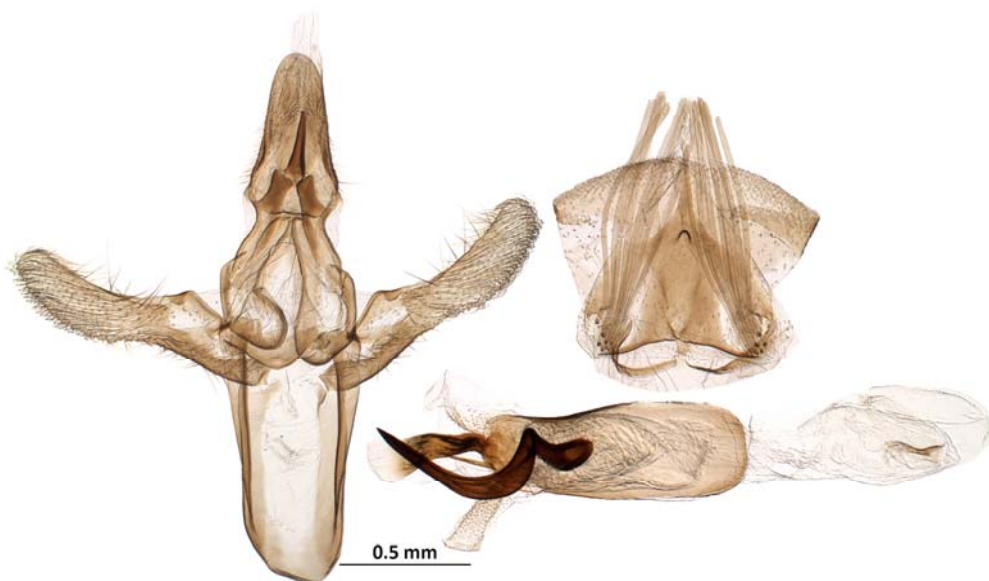
Figs. 29, 30 - *Selenia lunularia*, Upperside of male (left). Male genitalia, GP2822 (right), Elmalık, M. Kemal (Cesa)



Figs. 31, 32 - *Orthosia incerta*. Upperside of male (left). Male genitalia, GP2757 (right), Elmalık, M. Kemal (Cesa)



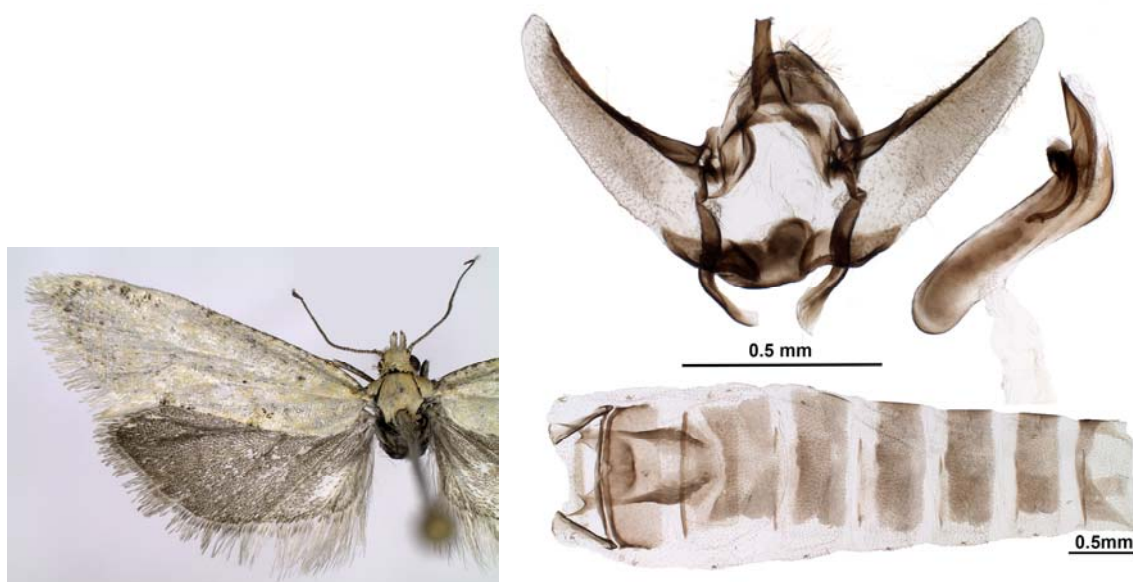
Figs. 33, 34 - *Exaeretia ledereri*. Male genitalia, GP2847 (left); *Pempeliella ornatella*, GP2850♂. Tympanal organ (before and after preparation) (right) both from Elmalık, M. Kemal (Cesa)



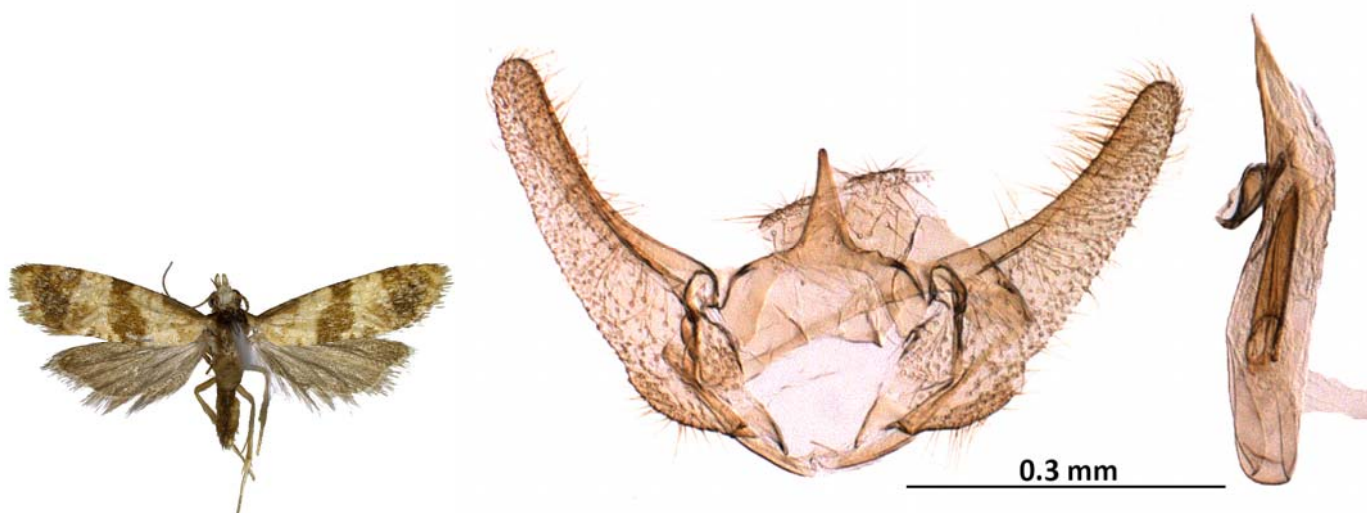
Figs. 35, 36 - *Pempeliella ornatella*, Male genitalia and coremata, GP2850♂. Elmalık, M. Kemal (Cesa)



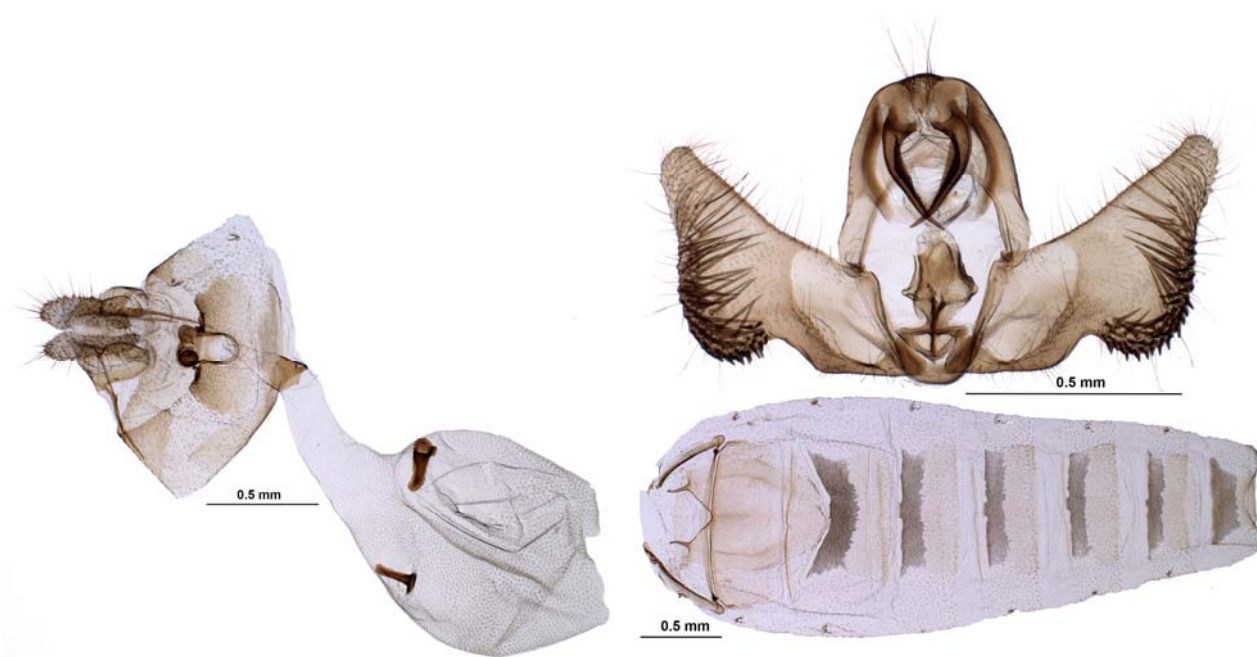
Figs. 37, 38 - *Cochylimorpha fucosa*. Male genitalia, GP2849. Elmalık, M. Kemal (Cesa)



Figs. 39-41 – *Phalonidia acutana*: left wings of adult male (left), male genitalia, GP2709♂, Van Pr., Edremit, Elmalık, M. Kemal (Cesa)



Figs. 42, 43 – *Phalonidia contractana*. Upperside of male (left); male genitalia, GP2709♂ (right), Edremit, Elmalık, M. Kemal (Cesa)



Figs. 44-46 – *Phaneta pauperana*: Female genitalia, GP2671♀ (left), male genitalia and abdominal skin, GP2672♂ (right), both from Edremit, Elmalık, M. Kemal (Cesa)

Priamus³**ISSN 1015-8243**

Priamus is the first international serial publication of the Centre for Entomological Studies Ankara, and appears in volumes at irregular intervals. Each volume is composed of two parts. This serial is published online from the volume 13 on. It is regularly and permanently archived in the recognized international site, "The Internet Archive", in accordance with the Rules of the International Code of Zoological Nomenclature (Article 8.5.3.1). The publication languages are English or Turkish.

(see also editorial announcement: Cesa News 115: page 20 on 21 November 2015, <https://archive.org/details/CentreForEntomologicalStudiesAnkaraCesaNewsNr.115>)

Centre for Entomological Studies Ankara



(A scientific Consortium)
(co-operation of research workers for pure-scientific, not commercial purpose)

Web Page of the Cesa: <http://www.cesa-tr.org/>

Scientific Serials: Priamus & Priamus Supplement (print and online versions) (ISSN 1015-8243)⁴, Miscellaneous Papers (print and online versions) (ISSN 1015-8235)⁵, Memoirs (print and online versions) (ISSN-8227)⁶, DVD Films⁷, Iconographia Insectorum⁸ (online), Cesa Publications on African Lepidoptera (online)⁹, Cesa News (online)¹⁰, Cesa Books (online)¹¹

Owners / Sahipleri - Editors / Yayıncılar: Prof. em Dr Ahmet Ömer Koçak (c/o Van Yüzüncü Yıl University, Van, Turkey), Asst. Prof. Dr Muhabbet Kemal Koçak (c/o Van Yüzüncü Yıl University, Van, Turkey).

Editorial Board of all Scientific Serials of the CESA / Bütün Bilimsel Yayınların Yayın Kurulu: Insecta, taxonomy, nomenclature, ecology, faunistics: Prof. Dr Ahmet Ömer Koçak (c/o Van Yüzüncü Yıl Üniversitesi, Turkey), Asst. Prof. Dr Muhabbet Kemal Koçak (Van Yüzüncü Yıl University, Turkey).

Chief referees of all Scientific Serials of the CESA: Prof. em Dr Ahmet Ömer Koçak & Asst. Prof. Dr Muhabbet Kemal Koçak: Insecta, taxonomy, nomenclature, fauna, ecology, catalogues, checklists of the Old World.

Expert referees according to the subject areas: Dr Peter Huemer (Austria): Gelechiidae, and some Microlepidoptera groups in Palaearctic (Lepidoptera). Dr J. B. Heppner (U.S.A.): Microlepidoptera of Nearctic and Neotropical. Dr G. Baldizzzone (Italy): Coleophoridae (Lepidoptera). Dr V. Korneyev (Ukraine): Tephritidae, Pyrgotidae, Ulidiidae (Diptera). Prof. Dr Y.G.Verves (Ukraine): Sarcophagidae (Diptera). Dr Daniel Burckhardt (Switzerland): Psyllidae (Homoptera). Prof. Dr E. Heiss (Austria): Hemiptera. Dr R. Ehrmann (Germany): Mantodea. Prof. Dr Mustafa Ünal (Bolu, Turkey): Orthoptera. Prof. Dr Hüseyin Özdikmen (Turkey): Coleoptera. Prof. Dr Suat Kiyak (Turkey): Hemiptera.

Plant taxonomy, flora and vegetation: Assoc. Prof. Dr Murat Ünal, Asst. Prof. Dr Mesut Pınar, (Yüzüncü Yıl University, Van, Turkey).

Molecular studies: Dr Sibel Kızıldağ (Van Yüzüncü Yıl University, Van, Turkey).

Editorial policy: The submitted manuscript is evaluated by the Chief Editor and Referee. In case of need, the manuscript is sent to expert referees according to the subject areas.

ALL RIGHTS RESERVED

Correspondences should be addressed to: Prof. em Dr Ahmet Ömer Koçak, c/o Yüzüncü Yıl University, Fen Fakültesi, Biyoloji Bölümü, Kampus, Van / Turkey. - e-mail: cesa_tr@yahoo.com.tr

All the serials of the Cesa are archived regularly by the Internet Archive (300 Funston Ave., San Francisco, CA 94118, U.S.A.), in accordance with the rules of the International Codes of Zoological Nomenclature (ICZN)

<https://archive.org/>

also recorded regularly by the Zoological Record, Thomson Reuters, Enterprise House, Innovation Way, Heslington, York, YO10 5NQ, United Kingdom, <https://clarivate.com/>

³ <http://www.cesa-tr.org/Priamus.htm> - pdf available after corresponding; *Priamus* (online) available at the Internet Archive.

⁴ <http://www.cesa-tr.org/Pri.htm>

⁵ <http://www.cesa-tr.org/Miscell.htm>

⁶ <http://www.cesa-tr.org/Memoirs.htm>

⁷ <http://www.cesa-tr.org/CDF.htm>

⁸ <http://www.cesa-tr.org/Icon.htm>

⁹ <http://www.cesa-tr.org/CPAL.htm>

¹⁰ <http://www.cesa-tr.org/Cesanews.htm>

¹¹ <http://www.cesa-tr.org/Cesabooks.htm>